

Date: Fri, 20 Aug 93 04:30:21 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #16
To: Ham-Homebrew

Ham-Homebrew Digest Fri, 20 Aug 93 Volume 93 : Issue 16

Today's Topics:

Electro-nostalgia CHALLENGE; was: Re: Why aren't electronics cool any more? (2
msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>

Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>

Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 18 Aug 93 07:19:48 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!news.nd.edu!bsu-cs!
news.cs.indiana.edu!babbage.ece.uc.edu!ucunix.san.uc.edu!ucunix.san.uc.edu!not-
for-mail@network.ucsd.edu
Subject: Electro-nostalgia CHALLENGE; was: Re: Why aren't electronics cool any
more?
To: ham-homebrew@ucsd.edu

Contrariwise, let me build on the discussion and ask about projects
using those Compactron tubes I've pulled out of all those old TV sets I
cannibalized when filling my junkbox...I've heard of a few articles in
the ham magazines which made use of them, and have a couple of old
photocopies running around, but I'd like to see/hear of some more.
Would there be too much inter-section interference/modulation to
be able to make a small-tube-count superhet rcvr and/or xmtr out of
these?

Ted Morris, WB8VNV
morris@ucunix.san.uc.edu
Previously Politically-Incorrect Tag Line Has Been Removed.

Date: 19 Aug 93 09:23:48
From: elroy.jpl.nasa.gov!sdd.hp.com!nigel.msen.com!ilium!rphroy!rcsuna.gmr.com!
rcsuna.gmr.com!vbreault@ames.arpa
Subject: Electro-nostalgia CHALLENGE; was: Re: Why aren't electronics cool any
more?
To: ham-homebrew@ucsd.edu

In article <24thak\$iod@ucunix.san.uc.edu> morris@ucunix.san.uc.edu (Ted Morris)
writes:

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Would there be too much inter-section interference/intermodulation to
be able to make a small-tube-count superhet rcvr and/or xmtr out of
these?

Back in 1965 (+/- 1) I built a low power FM transmitter (~90mHz) using
a compactron. I think the design came from _Electronics Illustrated_.
It was a fun project and the transmitter worked fairly well. I was able
to load up a stack of records on the family HI-FI and listen to them
on a portable radio anywhere in or around our home.

--
Val Breault - N80EF - vbreault@gmr.com \ / |
Instrumentation dept GM NAO R&D Center \ / |
My opinions are not necessarily those of \ /__|
GMR nor of the General Motors Corporation \ / |___

Date: 19 Aug 1993 02:41:45 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!gatech!news-
feed-2.peachnet.edu!hobbes.cc.uga.edu!aisun3.ai.uga.edu!mcovingt@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <24s7as\$6gm@usenet.INS.CWRU.Edu>, <24se7t\$e9v@hobbes.cc.uga.edu>,
<24thak\$iod@ucunix.san.uc.edu>-2.peach
Subject : Re: Electro-nostalgia CHALLENGE; was: Re: Why aren't electronics cool
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>Would there be too much inter-section interference/modulation to
>be able to make a small-tube-count superhet rcvr and/or xmtr out of
>these?

No; inter-section interference is practically nil. Plates make good shields.

The thing to do is look in a tube directory and find the characteristics of each section, then see which discrete tubes each of them resembles. Then adapt circuits for that tube. For example, if you find a triode section that is like a 6C4, you can use 6C4 circuits with it.

--

:- Michael A. Covington, Associate Research Scientist : *****
:- Artificial Intelligence Programs mcovingt@ai.uga.edu : *****
:- The University of Georgia phone 706 542-0358 : * * *
:- Athens, Georgia 30602-7415 U.S.A. amateur radio N4TMI : ** *** ** <><

Date: 19 Aug 93 02:33:34 PDT
From: news.cerf.net!crash!cmkrnl!jeh@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <1993Aug15.020446.6568@bnr.ca>, <24po7c\$ou8@senator-bedfellow.MIT.EDU>,
<24r87r\$462@hobbes.cc.uga.edu>
Subject : <None>

In article <24r87r\$462@hobbes.cc.uga.edu>, mcovingt@aisun3.ai.uga.edu (Michael Covington) writes:

> Here's a challenge.

>

> One particular byway of electronic history that intrigues me is
> low-voltage vacuum tubes -- that is, tubes that operate off a single
> 12-volt supply. They were introduced (for car radios) around 1958 and
> became obsolete around 1960 when good RF transistors became affordable.
> So they're an almost-forgotten chapter of history.

>

> My challenge: DO SOMETHING INTERESTING WITH THEM. They are still
> available from Antique Electronic Supply, Tempe, Arizona, and at
> hamfests. The 12U7 (not 12AU7) dual triode is one of the most useful;
> they also had a pentagrid converter and a few other things.
> In a pinch, a 12AT7 will substitute for a 12U7 and work OK in

> some low-voltage tube circuits.

Yep. Cadillac (and probably other GM divisions) used these in their car radios for a while. They couldn't put out any power, so a single power transistor was used for the audio output stage, but the rest of the set was low-voltage tubes, and no vibrator.

Popular Electronics had a couple of "starved circuit" tube projects around '65 or so... an audio oscillator and a low-power audio amp. If I remember right these used regular (not low-plate-voltage) tubes, they just didn't need much plate current.

--- Jamie Hanrahan, Kernel Mode Systems, San Diego CA
Internet: jeh@cmkrnl.com (JH645) Uucp: uunet!cmkrnl!jeh CIS: 74140,2055

Date: Thu, 19 Aug 1993 13:15:23 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
sol.ctr.columbia.edu!emory!kd4nc!ke4zv!gary@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <24s7as\$6gm@usenet.INS.CWRU.Edu>, <24se7t\$e9v@hobbes.cc.uga.edu>,
<24thak\$iiod@ucunix.san.uc.edu>.edu
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: Electro-nostalgia CHALLENGE; was: Re: Why aren't electronics cool
any more?

In article <24thak\$iiod@ucunix.san.uc.edu> morris@ucunix.san.uc.edu (Ted Morris)
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>be able to make a small-tube-count superhet rcvr and/or xmtr out of
>these?

They work fine. For example, the 6C10 is basically 3 sections of a
12AT7 in one envelope, with 6 volt filaments. They were used in
the B&W 6100 SSB transmitter. I have one, it works fine, and I've
got about a half a dozen spare 6C10s on the shelf for that day
when it doesn't work fine anymore. :-)

Gary

--

```
Gary Coffman KE4ZV          | "If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good   | uunet!rsiatl!ke4zv!gary
534 Shannon Way            | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244    | -Ray Stevens          |
```

Date: Thu, 19 Aug 1993 13:17:51 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
sol.ctr.columbia.edu!emory!kd4nc!ke4zv!gary@network.ucsd.edu
To: ham-homebrew@ucsd.edu

References <24t1tj\$ck6@zikzak.apana.org.au>, <1993Aug18.155804.21260@ke4zv.uucp>,
<24ttse\$sa4@hobbes.cc.uga.edu>g
Reply-To : gary@ke4zv.UUCP (Gary Coffman)
Subject : Re: What kits would you like to see?

In article <24ttse\$sa4@hobbes.cc.uga.edu> mcovingt@aisun3.ai.uga.edu (Michael
Covington) writes:

>In article <1993Aug18.155804.21260@ke4zv.uucp> gary@ke4zv.UUCP (Gary Coffman)
writes:

>>In article <24t1tj\$ck6@zikzak.apana.org.au> petert@zikzak.apana.org.au (Peter
T.) writes:

>>>

>>>How about readouts for car management systems, so that the

>>>average person knows what is happening to his/her car.

>>>Or is that a proprietry no no?

>>

>>Oh, this is a good one, commercial units go for over \$1,000, but

>>they're really simple devices, a single chip micro and a bit of

>>glue. Maybe a bit more than \$40, but definitely a project needing

>>to be done.

>

>Yes; the right way to do it would probably be as a very simple hardware

>interface to your laptop computer, together with software.

For those of us amateur mechanics who don't have laptops, or don't
want to get them greasy, I'd rather have a small shockproof handheld
unit with LCD readout that I can actually use under the hood of a
running car.

Gary

--

```
Gary Coffman KE4ZV          | "If 10% is good enough | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | for Jesus, it's good   | uunet!rsiatl!ke4zv!gary
534 Shannon Way            | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244    | -Ray Stevens          |
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End of Ham-Homebrew Digest V93 #16
